

## COASTAL COMMISSION STAFF QUESTION: SOUND WALL REQUIREMENTS

Reply:

### CALTRANS/FHWA $L_{EQ}(H)$ CRITERIA

FHWA has adopted Noise Abatement Criteria (NAC) for highway construction projects as published in the "Federal Aid Highway Program Manual of Federal Highway Administration" Volume 7, Chapter 7, Section 2, entitled "Procedures for Abatement of Highway Traffic Noise and Construction Noise" (September 18, 1982). The standards are also codified in Code of Federal Regulations (23 CFR 772). The following noise standards are taken from the FHWA PPM 772 (also 23 CFR 773).

"NOISE STANDARDS. The highway traffic noise prediction requirements, noise analyses, noise abatement criteria, and requirements for informing local officials in this regulation constitute the noise standards mandated by 23 U.S.C. 109(i). All highway projects which are developed in conformance with this regulation shall be deemed to be in conformance with the Federal Highway Administration (FHWA) noise standards"

The NAC specified by the FHWA have been adopted by Caltrans. Caltrans NAC are contained in its "Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects" (October 1998, Updated August 2006). For interior areas, the criteria assume that typical wood frame homes provide 10 dBA noise reduction (outdoor to indoor) with windows open and 20 dBA reduction with windows closed.

The FHWA/Caltrans NAC are only applicable to areas along new roads constructed by a project or existing roads that would be modified by a project (i.e., addition of lanes). The NAC are not assessed along existing roadways that would not be physically altered by the project. In terms of the FHWA/Caltrans NAC, when the predicted future with project noise levels approach or exceed the NAC for uses along new roads constructed by the project or existing roads that would be modified by the project (i.e., addition of lanes), noise abatement measures (e.g., construction of a noise barrier) must be considered.

The NAC are in terms of the worst hourly  $L_{eq}$  traffic noise impact on a regular basis for the design year. Approaching the NAC is considered as a noise level within one dB of the NAC. For residential areas, the NAC is 67 dBA  $L_{eq}(h)$ . Noise levels of 66 dBA  $L_{eq}(h)$  in these areas are considered approaching the NAC.

Even if the predicted noise level does not approach or exceed the NAC, traffic noise impacts can occur when the with project noise levels substantially exceed the existing noise levels. Caltrans has established a substantial increase to be a 12 dBA increase in the peak-hour  $L_{eq}$  noise level.

For the proposed project, Mestre Greve Associates (MGA 2003) identified generalized distances from the centerline for different road cross-sections beyond which an Alternative would not result in noise levels greater than 66 dBA. For parks and recreation resources, the FHWA/Caltrans NAC consider noise levels greater than 66 dBA to be of concern.

## **SAN DIEGO COUNTY**

The San Diego County Municipal Code is not applicable to Camp Pendleton and does not contain standards applicable to campgrounds.

## **STATE PARKS**

California Administrative Code includes Code 4320, which includes measures to insure peace and adequate rest for visitors of State Parks. As enforced by this code, no person shall at any time, without the specific permission of the State Parks and Recreation Department, use outside machinery or electronic equipment at a sound volume that is likely to be disturbing to others, nor operate an engine-driven electric generator that emits a disturbing level sound volume between the hours of 8:00 p.m. and 10:00 a.m.

California Administrative Code 654.05, pertaining to boats out of the California Boating Law, forbids operation of boats of various noise levels within 1 mile of California coastline. Boats with engines manufactured before January 1, 1993, may not produce noise greater than 90 dB within 1 mile of the shore. Boats with engines manufactured after January 1, 1993, may not produce noise greater than 88 dB within 1 mile of the shore. A recreational boat may not produce a noise level of 75 dB measured as specified in the Society of Automotive Engineers Recommended Practice SAE J1970 (Shoreline Sound Level Measurement Procedure). However, a measurement of noise level that is in compliance with the noise level of 75 dB does not preclude the conducting of a test of noise levels relative to the date it was manufactured. For purposes of enforcement, the code also calls for a law enforcement officer who is proficient in the use of a decibel measuring device. Also, the code notes that the State Department of Parks and Recreation may revise the measurement procedure per advances in technology.

State Parks is not subject to municipal code noise ordinances.

## **CONCLUSION REGARDING APPLICABLE NOISE STANDARDS**

The California Administrative Code includes noise standards for the operation of equipment or machinery in State parks and operation of boats within 1 mile of California coastline. These standards apply to the daily operation of State parks and reflect compliance standards for potential nuisance noise sources. Based on review of CEQA documents posted to the State Parks and Recreation Department Web site (January 2007), CEQA documents for proposed projects in State parks typically rely on the thresholds included in CEQA Guidelines Appendix G for analysis of noise impacts. For State highway and other Caltrans projects, Caltrans relies upon adopted FHWA NAC for the impacts analysis of highway projects.